

WHAT IS CLAIMED IS:

1. An apparatus for formation of images, which includes hardware resources, such as a display section, a print section, and an imaging section, used in image formation processing and which provides user service including one or more of printing, coping, or facsimile relating to image formation processing, said apparatus comprising:

applications each of which conducts processing peculiar to each of the user service and which can be mounted
10 in a plurality; and

a platform which is interposed between the applications and the hardware resources, and which conducts management of the hardware resources, execution control and image formation processing needed in common by at least two
15 of the applications when providing the user service.

2. The apparatus according to claim 1, wherein the platform comprises an application program interface which enables reception of a processing request from the
20 applications by using a predefined function.

3. The according to claim 1, wherein the platform comprises:

control service which interprets a processing request
25 from the applications and causes an acquisition request of

the hardware resources to be generated; and
a system resource manager which manages one or more
hardware resources and arbitrates between acquisition
requests from the control service.

5

4. The apparatus according to claim 3, wherein the control
service comprises a plurality of service modules.

5. The apparatus according to claim 4, wherein the service
10 modules comprise modules of at least two from among engine
control service which controls an engine, memory control
service which controls a memory and a hard disk, operation
panel control service which controls an operation panel,
fax control service which controls fax communication, and
15 network control service which controls network
communication.

6. The apparatus according to claim 4, wherein the service
modules comprise at least network control service which
20 controls network communication, and the applications are
acquired and mounted via a network connected by the network
control service.

7. The apparatus according to claim 3, wherein the platform further comprises a general purpose operating system, and the system resource manager manages the one or more hardware resources via the general purpose operating
5 system.

8. The apparatus according to claim 1, wherein the plurality of applications can be added or deleted application by application.

10

9. The apparatus according to claim 1, wherein the plurality of applications conduct screen control, key operation control and job generation relating to the user services.

15

10. The apparatus according to claim 9, wherein the plurality of applications comprise at least printer application, copy application, fax application, scanner application, net file application, and process inspection
20 application.

11. A method of forming images, which provides user services including one or more of printing, coping, or facsimile relating to image formation processing, by using
25 hardware resources, such as a display section, a print

section, and an imaging section, used in image formation processing, the method comprising the steps of:

conducting processing peculiar to each of the user service by using applications which can be mounted in a
5 plurality; and

conducting management of the hardware resources, execution control and image formation processing needed in common by at least two of the applications, when providing the user service, by using a platform interposed between
10 the applications and the hardware resources.

12. Application programs which can be mounted in a plurality on an image formation apparatus, the image formation apparatus including hardware resources, such as
15 a display section, a print section, and an imaging section, used in image formation processing and providing user services including one or more of printing, coping, or facsimile, relating to image formation processing, wherein

each of the application programs is executed to operate
20 on a platform which conducts management of the hardware resources, execution control and image formation processing, when providing user service such as print, copy, or facsimile.

13. An apparatus for formation of images, which includes hardware resources, such as a display section, a print section, and an imaging section, used in image formation processing and which provides user service including one or more of printing, coping, or facsimile relating to image formation processing, said apparatus comprising:

applications each of which conducts processing peculiar to each of the user service and which can be mounted in a plurality; and

10 a platform which is interposed between the applications and the hardware resources, and which conducts management of the hardware resources, execution control and image formation processing needed in common by at least two of the applications when providing the user service, the 15 platform including,

common system service which conducts management of the hardware resources, execution control and image formation processing; and

20 application service which is interposed between the plurality of applications and the common system service and which at least conducts job generation corresponding to applications.

14. The apparatus according to claim 13, wherein the platform comprises an application program interface which enables reception of a processing request from the applications by using a predefined function.

5

15. The apparatus according to claim 13, wherein the common system service comprises:

control service which interprets a processing request from the applications and causes an acquisition request of
10 the hardware resources to be generated; and

a system resource manager which manages one or more hardware resources and arbitrates between acquisition requests from the control service.

15 16. The apparatus according to claim 15, wherein the control service comprises a plurality of service modules.

17. The apparatus according to claim 16, wherein the service modules comprise modules of at least two from among
20 engine control service which controls an engine, memory control service which controls a memory and a hard disk, operation panel control service which controls an operation panel, fax control service which controls fax communication, and network control service which controls network communication.
25

18. The apparatus according to claim 16, wherein the service modules comprise at least network control service which controls network communication, and the applications are acquired and mounted via a network connected by the
5 network control service.

19. The apparatus according to claim 15, wherein the platform further comprises a general purpose operating system, and the system resource manager manages the one or
10 more hardware resources via the general purpose operating system.

20. The apparatus according to claim 13, wherein the plurality of applications can be added or deleted application
15 by application.

21. The apparatus according to claim 13, wherein the plurality of applications conduct screen control and key operation control relating to services of print, copy and
20 facsimile.

22. The apparatus according to claim 21, wherein the plurality of applications comprise at least printer application, copy application, fax application, scanner
25 application, net file application, and process inspection

application.

23. The apparatus according to claim 13, wherein the application service comprises:

5 a job generation module which generates a job corresponding to each application; and

 a data communication module which conducts data communication relating to each application.

10 24. A method of forming images, which provides user services including one or more of printing, coping, or facsimile relating to image formation processing, by using hardware resources, such as a display section, a print section, and an imaging section, used in image formation processing, the method comprising the steps of:

 conducting processing peculiar to each of the user service by using applications which can be mounted in a plurality; and

 conducting management of the hardware resources, execution control and image formation processing needed in common by at least two of the applications, when providing the user service, by using a platform, wherein the platform includes common system service which is interposed between the applications and the hardware resources and which 25 conducts management of the hardware resources, execution

control and image formation processing, and application service which is interposed between the applications and the common system service and which conducts at least job generation corresponding to an application.

5

25. Application programs which can be mounted in a plurality on an image formation apparatus, the image formation apparatus including hardware resources, such as a display section, a print section, and an imaging section,
10 used in image formation processing and providing user services including one or more of printing, coping, or facsimile, relating to image formation processing, wherein each of the application programs is executed to operate on a platform, when providing user service such as print,
15 copy, or facsimile, and the platform includes common system service which conducts management of the hardware resources, execution control and image formation processing, and application service which is interposed between the applications and the common system service and which conducts
20 at least job generation corresponding to an application.

OPEN SOURCE LICENSE